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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/676,572

09/30/2003

Stuart D. Cheshire

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07/27/2007

APPLE COMPUTER, INC.

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EXAMINER

HAMZA, FARUK

ART UNIT

PAPER NUMBER

2155

MAIL DATE

DELIVERY MODE

07/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/676,572

Applicant(s)

CHESHIRE, STUART D.

Examiner

Faruk Hamza

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-9,11-17 and 19-34 is/are pending in the application.
- 4a) Of the above claim(s) 2,10 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-9,11-17 and 19-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) 25-34 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/08/04,10/23/03</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to the application filed on September 30, 2003. Claims 2, 10 and 18 have been canceled. Claims 1, 3-9, 11-17 and 19-34 are pending.

### ***Election/Restrictions***

2. This application contains claims directed to the following patentably distinct species of the claimed invention: Species 1 (A method for validating a resource record in a cache; Fig. 3, P [0032]); Species 2 (A method for responding to a query at a device in a network, related to a service provided by the device; Fig. 4, P [0037]); Species 3 (A computer-readable storage medium storing a resource record corresponding to a device in a network; Fig. 2, P [0029-0030]).

Related inventions are distinct if the inventions as claimed are not connected in at least one of design, operation, or effect (e.g., can be made by, or used in, a materially different process) and wherein at least one invention is patentable (novel and non-obvious) over the other (though they may each be unpatentable over the prior art). See MPEP § 802.01(II).

In the instant case, the Species 1, 2 and 3 are not connected in at least mode of operation, which is clearly evidenced by Paragraph [0032-0035], [0037] and [0029-0030], Fig. 2, Fig. 3, Fig. 4 and relevant parts of the disclosure.

Art Unit: 2155

The Examiner has determined that the additional attributes present in Species 2 and 3 would not be an obvious variation of attributes present in Species 1 to one of ordinary skills in the art. Therefore, Species 2 and 3 are patentably distinct from Species 1, though they may each be unpatentable over the prior art.

The Examiner has determined that the Species 1,2 and 3 differ in mode of operation from one another in ways that would not be obvious to one of ordinary skills in the art at the time the invention was made. Therefore, Specie 1,2 and 3 are patentably distinct from one another, though they may each be unpatentable over the prior art.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim appears to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed

Art Unit: 2155

generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

A telephone call was made to the applicant's representative (Mr. Park, Arvin Reg. No. 41,241) on May 25, 2007 to request an oral election to the above restriction requirement. Species 1 (Claims 1,3-9,11-17 and

Art Unit: 2155

19-24) was elected without traverse. Species 2 (Claims 25-33) and Species 3 (Claim 34) are withdrawn from consideration.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1,9 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the examiner resource record is retrieving from where.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1,3-9,11-17 and 19-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Yokoyama (U.S. Patent Number 7,006,836) hereinafter referred as Yokoyama.

Yokoyama teaches the invention as claimed including a specific device periodically detects devices existing proximally thereto, and holds a list of information of services provided by the detected devices (abstract).

As to claim 1, Yokoyama teaches a method for validating a resource record in a cache at a client computer system within a network, comprising:

retrieving the resource record at the client (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

issuing one or more queries for the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

waiting for a response to the query (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

if the response to the query is not received in a pre-determined amount of time, invalidating the resource record at the client (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 3, Yokoyama teaches the method of claim 1, further comprising:

receiving a multicast message from a second client querying a second device (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

locating a second resource record associated with the second device (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

waiting for a multicast response to the multicast query (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

if after a pre-determined number of queries the multicast response to the multicast query is not received in the pre-determined amount of time, invalidating the second resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 4, Yokoyama teaches the method of claim 1, wherein invalidating the resource record further comprises invalidating a child record of the resource record (Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 5, Yokoyama teaches the method of claim 1, wherein if the response to the query is not received in a pre-determined amount of time, the method further comprises:



retrieving a parent record of the resource record at the client, wherein the parent record refers to the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

issuing a query for the parent record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

waiting for a response to the query from the device (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

if the response to the query is not received in a pre-determined amount of time, invalidating the parent record, and then repeating the above process by applying it recursively to any records that refer to the now-invalidated parent record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 6, Yokoyama teaches the method of claim 1, wherein if the response to the query is not received in a pre-determined amount of time, the method further comprises:

retrieving a parent record of the resource record at the client, wherein the parent record refers to the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

issuing a query for the parent record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

receiving a response to the query from the device, wherein the response includes information for updating the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

updating the resource record with the information received in the response (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 7, Yokoyama teaches the method of claim 6, wherein the method further comprises updating the parent record with the information received in the response (Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 8, Yokoyama teaches the method of claim 1, wherein the method is invoked at a pre-specified time interval (abstract).

As to claim 9, Yokoyama teaches a computer-readable storage medium storing instructions that when executed by a computer cause the computer to perform a method for validating a resource record in a cache at a client computer system within a network, the method comprising:

retrieving the resource record at the client (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

issuing one or more queries for the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

waiting for a response to the query (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

if the response to the query is not received in a pre-determined amount of time, invalidating the resource record at the client (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

Art Unit: 2155

As to claim 11, Yokoyama teaches the computer-readable storage medium of claim 9, wherein the method further comprises:

receiving a multicast message from a second client querying a second device (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

locating a second resource record associated with the second device (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

waiting for a multicast response to the multicast query (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

if after a pre-determined number of queries the multicast response to the multicast query is not received in the pre-determined amount of time, invalidating the second resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 12 Yokoyama teaches the computer-readable storage medium of claim 9, wherein invalidating the resource record further comprises invalidating a child record of the resource record (Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 13, Yokoyama teaches the computer-readable storage medium of claim 9, wherein if the response to the query is not received in a pre-determined amount of time, the method further comprises:

retrieving a parent record of the resource record at the client, wherein the parent record refers to the resource record; issuing a query

for the parent record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

waiting for a response to the query from the device (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

if the response to the query is not received in a pre-determined amount of time, invalidating the parent record, and then repeating the above process by applying it recursively to any records that refer to the now-invalidated parent record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 14, Yokoyama teaches the computer-readable storage medium of claim 9, wherein if the response to the query is not received in a pre-determined amount of time, the method further comprises:

retrieving a parent record of the resource record at the client, wherein the parent record refers to the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

issuing a query for the parent record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

receiving a response to the query from the device, wherein the response includes information for updating the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

updating the resource record with the information received in the response (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 15, Yokoyama teaches the computer-readable storage medium of claim 14, wherein the method further comprises updating the parent record with the information received in the response (Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 16, Yokoyama teaches the computer-readable storage medium of claim 9, wherein the method is invoked at a pre-specified time interval (abstract).

As to claim 17, Yokoyama teaches an apparatus that validates a resource record in a cache, comprising:

- a retrieval mechanism at the client configured to retrieve the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

- an invalidation mechanism configured to, issue one or more queries for the resource record, wait for a response to the query (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58), and

- if the response to the query is not received in a pre-determined amount of time, to invalidate the resource record at the client (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 19, Yokoyama teaches the apparatus of claim 17, wherein the invalidation mechanism is configured to:

- receive a multicast message from a second client querying a second device (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

locate a second resource record associated with the second device (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

wait for a multicast response to the multicast query (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

if after a pre-determined number of queries the multicast response to the multicast query is not received in the pre-determined amount of time, to invalidate the second resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 20, Yokoyama teaches the apparatus of claim 17, wherein invalidating the resource record further comprises invalidating a child record of the resource record (Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 21, Yokoyama teaches the apparatus of claim 17, wherein if the response to the query is not received in a pre-determined amount of time, the invalidation mechanism is additionally configured to:

retrieve a parent record of the resource record at the client, wherein the parent record refers to the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

issue a query for the parent record; wait for a response to the query from the device (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and

if the response to the query is not received in a pre-determined amount of time, to invalidate the parent record, and to then repeat the

Art Unit: 2155

above process by applying it recursively to any records that refer to the now-invalidated parent record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 22, Yokoyama teaches the apparatus of claim 17, further comprising an updating mechanism, wherein if the response to the query is not received in a pre-determined amount of time, the updating mechanism is configured to:

retrieve a parent record of the resource record at the client, wherein the parent record refers to the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

issue a query for the parent record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58);

receive a response to the query from the device, wherein the response includes information for updating the resource record (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58); and to

update the resource record with the information received in the response (abstract, Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 23, Yokoyama teaches the apparatus of claim 22, wherein the updating mechanism is additionally configured to update the parent record with the information received in the response (Column 4, lines 43-Column 5, lines 60, Column 7, lines 24-58).

As to claim 24, Yokoyama teaches the apparatus of claim 17, wherein the apparatus is invoked at a pre-specified time interval (abstract).

5. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Schneider (U.S. Patent Number 7,194,552) discloses method for requesting for network resource.
  - Kuno et al. (U.S. Patent Number 7,117,201) discloses resource searching.
  - Ochiai et al. (U.S. Patent Number 7,085,763) discloses device search system.



Art Unit: 2155

- Harvell (U.S. Patent Number 6,834,302) discloses dynamic topology notification extensions for the domain name system.
- Roy et al. (U.S. Patent Number 6,496,859) discloses system for network device location.
- Choi et al. (U.S. Patent Number 5,222,242) discloses system for locating a node containing a requested resource and for selectively verifying the presence of the resource at the node.
- Link, II et al. (U.S. Patent Number 7,209,736) discloses method for delivering message to wireless devices.
- Luzzi et al. (U.S. Patent Number 6,321,263) discloses method for client-based application availability.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faruk Hamza whose telephone number is 571-272-7969. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached at 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR

Art Unit: 2155

only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll –free).

Faruk Hamza

Patent Examiner

Group Art Unite 2155



SALEH NAJJAR  
SUPERVISORY PATENT EXAMINER